

**ITEM 686.8101M**  
**ITEM 686.8103M**

**TRAFFIC SIGNAL SECTION - 300mm NON-METALLIC**  
**TRAFFIC SIGNAL SECTION - 200mm NON-METALLIC**

### **DESCRIPTION**

This specification shall consist of furnishing and installing non-metallic traffic signal heads.

### **PURPOSE**

These specifications describe adjustable modular type signals constructed primarily of non-metallic components that can be arranged in different combinations with each other to provide vehicle signal displays in accordance with the Manual of Uniform Traffic Control Devices. The performance of the traffic signal shall conform to the Standard for Adjustable Face Vehicular Traffic Control Signal Head, Technical Report Number 1 of the Institute of Traffic Engineers as revised in 1970.

### **GENERAL**

1. Each traffic signal head shall consist of three signal sections. Each signal head shall consist of such design and construction as to fit rigidly and securely together, to prevent the entrance of dirt or moisture and prevent the rotation or misalignment of the individual sections with each other or mounting/installation hardware.
2. It shall be possible to arrange a signal face in either a vertical or a horizontal alignment.

### **MATERIAL**

1. The major components of the signal such as the housing and door shall be Ultra-Violet stabilized polycarbonate resin.
2. The color of the signal shall be Federal Yellow (Mil STD 595A-Color Std 13538).
3. Color options for the housing, door, and visors shall have the color completely impregnated in the resin material.

### **HOUSING**

1. The housing of each signal section shall be one piece polycarbonate resin die molded complete with integral top, bottom and sides having a minimum thickness of 4mm.
2. Barriers and provision for six (6) terminals with inserts installed for easy field accessibility shall be an integral part of the rear wall of each housing.
3. The top and bottom of each housing shall have an opening to accommodate standard 40mm pipe fittings and brackets.

### **WIRING**

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1. Each socket will be provided with two color coded #18 AWG leads with Klip-Tite terminals. Wires shall be coded as follows:

White - with tracer identification of signal color Common Wire

Red - Red Lens Section

Yellow - Yellow Lens Section

Green - Green Lens Section

Type TEW 600 volt 105 thermoplastic 1mm insulation wire shall be used.

2. All socket leads shall be terminated in the center or Yellow signal section unless otherwise specified.

**LENSES:** Shall be Lexan

**WARRANTY**

The entire signal assembly shall be guaranteed to be free from defects in materials and workmanship for a period of one year from date of shipment by the manufacturer.

**METHOD OF MEASUREMENT**

Payment will be made at the unit price bid for each traffic signal furnished and installed in accordance with the contract documents or as directed by the ENGINEER.

**BASIS OF PAYMENT**

The unit price bid shall include the cost of all labor, transportation, equipment and incidentals as required to comply to the specification. Payment will be for the quantity furnished and installed at contract price each.

Payment will be made under:

<b><u>Item No.</u></b>	<b><u>Item</u></b>	<b><u>Pay Unit</u></b>
686.8101M	Traffic Signal Section 300mm Non-Metallic	EA
686.8103M	Traffic Signal Section 200mm Non-Metallic	EA